



## Parcel E-2 RI/FS



# Update on Parcel E-2 Remedial Investigation/ Feasibility Study Report Appendix O

Hunters Point Shipyard  
February 24, 2011



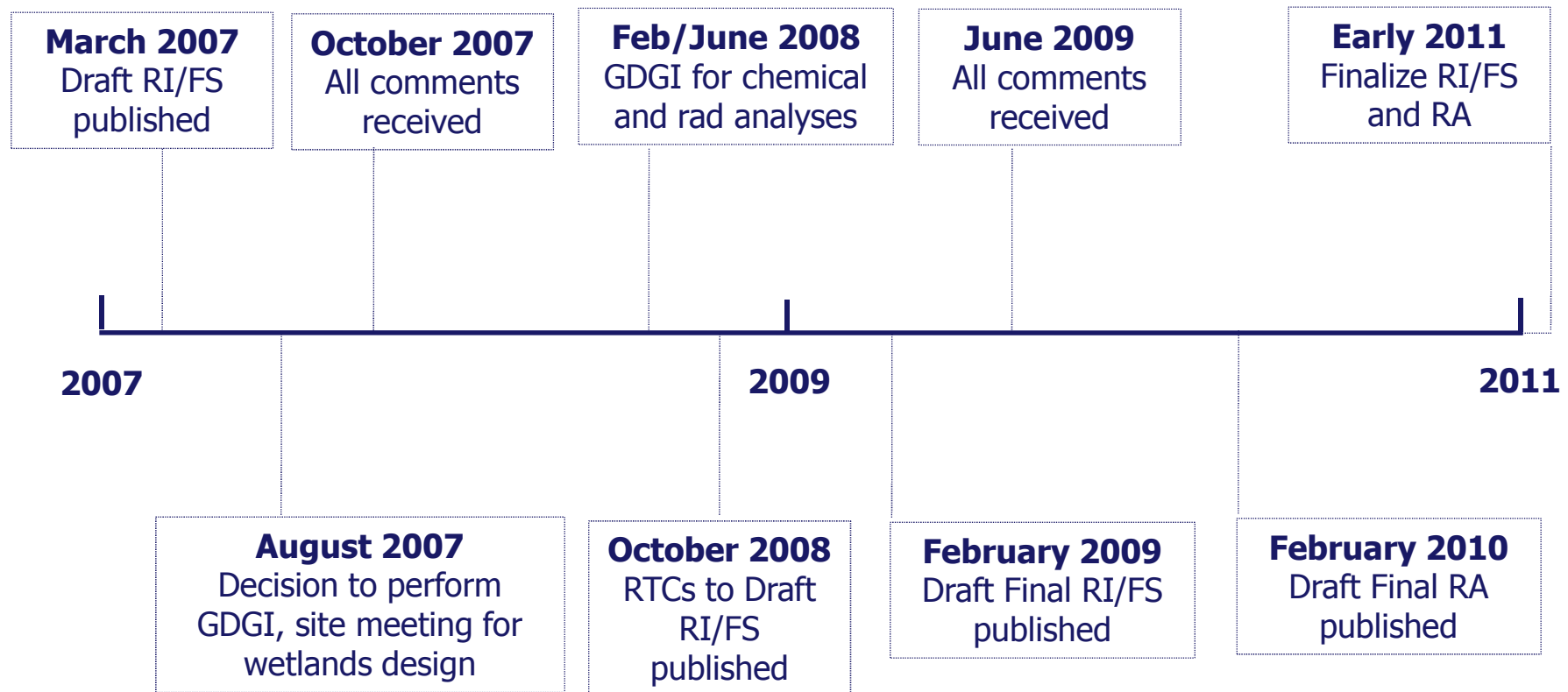
# Presentation Overview



- RI/FS Report Appendix O
  - Summarize key elements and updates to Appendix O
  - Schedule for over-the-shoulder review of Appendix O and submittal of Final RI/FS Report



# Timeline of Previous Activities



**GDGI** – groundwater data gaps investigation

**RI/FS** – remedial investigation/feasibility study

**RA** – radiological addendum

**RTCs** – response to comments



## RI/FS Report



- Since June 2009, Navy hosted technical meetings and solicited agency input regarding key technical issues on RI/FS Report (see attached chronology)
- Appendix O is the last key update requiring agency input
  - Appendix O was initially submitted for informal review on December 6, 2010; Navy decided that further clarification was required, and informal review period stopped
  - Revised document was re-submitted on February 18, 2011



## RI/FS Report Appendix O



- Appendix O, in the draft and draft final versions of the RI/FS Report, focused only on evaluating wetland mitigation options
- Appendix O was expanded in the final RI/FS Report to provide a more detailed regulatory analysis of the remedial alternatives relative to pertinent federal and state requirements



## Summary of Appendix O



Appendix O evaluates the intertidal shoreline zone and adjacent wetlands at Parcel E-2, and consists of:

- Description of existing conditions
- Summary of pertinent federal and state requirements
- Discussion of potential impacts during cleanup
- Analysis of remedial alternatives relative to substantive provisions of federal and state requirements
- Evaluation of compensatory mitigation options



# Description of Existing Conditions



## – Intertidal Shoreline Zone

- Intertidal sediments between the mean tide line and a riprap wall placed along portions of the shoreline for erosion control.
- Copper, lead, and PCBs in shoreline sediments were identified as a potential source of contamination to offshore Parcel F.
- Shoreline sediments may also contain radionuclides (cesium-137, radium-226, and strontium-90).

## – Adjacent Wetlands

- Seasonal freshwater wetland (1.3 acres) located close to but not contiguous with intertidal shoreline zone.
- Tidal wetlands (2.4 acres), located mostly within intertidal shoreline zone but extending slightly into upland areas.
- Soil near existing wetlands contain numerous metals and various organic compounds (primarily pesticides, PCBs, and PAHs) at concentrations that exceeded wetland cover criteria; also may contain radionuclides (cesium-137, radium-226, and strontium-90).

## – Site conditions confirm that some form of cleanup is needed to protect human health and the environment



# Pertinent Federal and State Requirements



## – Federal Requirements

- **Coastal Zone Management Act** requires that federal agency activities be conducted in a manner consistent with approved state management programs (San Francisco Bay Plan) to the maximum extent practicable.
- **Clean Water Act** – implementing regulations (Title 40 CFR Part 230 and Title 33 CFR Parts 320 and 330) set forth requirements for discharging fill material into wetlands and San Francisco Bay (referred to as “waters of the United States” ).

## – State Requirements

- **McAteer-Petris Act** requires that activities within San Francisco Bay and the shoreline (100 feet landward from the shoreline) be conducted in accordance with the policies of the San Francisco Bay Plan.
- **San Francisco Bay Plan**, Parts III and IV, pertain to protection of specific resources of San Francisco Bay (such as, tidal marshes and tidal flats), and identify specific conditions under which fill material may be placed in San Francisco Bay.





## Potential Impacts During Cleanup



- Heterogeneous distribution of chemicals has prompted the Navy to evaluate cleanup options throughout Parcel E-2, including intertidal shoreline zones and adjacent wetlands.
- As a result, there is no practicable alternative to addressing site contaminants within the intertidal shoreline zones and wetlands in a manner that avoids disturbance.
- Appropriate actions will be taken to minimize adverse impacts to the intertidal shoreline zones and adjacent wetlands



## Actions to Minimize Adverse Impacts



- Proposed alternatives would be performed with appropriate controls to protect water quality in the Bay
- Proposed alternatives would not extend into tidal flats and thus would not significantly affect the current patterns, water circulation, or normal water fluctuations offshore of Parcel E-2
- Proposed alternatives would address areas degraded by chemical contamination, thereby providing a net increase in environmental value to the aquatic ecosystem and allowing future use as open space
- Proposed alternatives would remove debris placed during shipyard operations, thereby enhancing the shoreline aesthetics relative to existing conditions



# Compensatory Mitigation Options



- Wetlands are the only on-site resource requiring compensatory mitigation because the proposed remedial alternatives will avoid disturbance to other natural resources cited in the pertinent federal and state requirements (such as tidal flats).
- The unavoidable loss of on-site wetlands at Parcel E-2 will be mitigated by the Navy; mitigation program will also address unavoidable losses of wetlands resulting from cleanup actions at Parcels B and E
- On-site mitigation was proposed in 2009 mitigation and monitoring plan; plan was prepared in accordance with pertinent federal and state requirements.



## Conclusion



The proposed alternatives comply with the substantive provisions of the federal Clean Water Act and the state McAteer-Petris Act and San Francisco Bay Plan because:

- There is no practicable alternative to addressing site contaminants within the intertidal zones and wetlands in a manner that avoids disturbance
- The proposed remedial alternatives incorporate appropriate actions to minimize adverse impacts to waters of the United States and San Francisco Bay
- Compensatory mitigation will be performed in accordance with the substantive provisions at Title 33 CFR § 320.4(r), Title 40 CFR Part 230 Subpart J, and Part IV of the San Francisco Bay Plan



## Schedule



- Over-the-shoulder review of Appendix O: **February 18 through March 4, 2011**
- Submit Final RI/FS report: **March 21, 2011**
- Submit Draft Proposed Plan: **April 14, 2011**